

Title (en)

ARRANGEMENT FOR COOLING OF RECIRCULATED EXHAUST GASES IN A COMBUSTION ENGINE

Title (de)

ANORDNUNG ZUR KÜHLUNG RÜCKGEFÜHRTER ABGASE IN EINEM VERBRENNUNGSMOTOR

Title (fr)

SYSTÈME POUR LE REFROIDISSEMENT DES GAZ D'ÉCHAPPEMENT DE RECIRCULATION DANS UN MOTEUR À COMBUSTION

Publication

EP 2342445 B1 20171213 (EN)

Application

EP 09825057 A 20091021

Priority

- SE 2009051196 W 20091021
- SE 0802349 A 20081105

Abstract (en)

[origin: WO2010053429A1] The present invention relates to an arrangement for recirculation of exhaust gases of a combustion engine (2) in a vehicle (1). The arrangement comprises an exhaust line (4) intended to lead exhaust gases out from the combustion engine (2), and a return line (5) adapted to recirculating part of the exhaust gases in the exhaust line (4) to the combustion engine (2). The arrangement comprises also a high-temperature cooling system (11) containing a circulating coolant in the form of a liquid medium which has at an intended operating pressure in the high-temperature cooling system (11) a boiling point of at least 150°C, an EGR cooler (10) for subjecting the recirculating exhaust gases in the return line (5) to a first step of cooling by the circulating high-temperature coolant, and a radiator element (13) in which the high-temperature coolant is intended to be cooled by air.

IPC 8 full level

F02M 26/28 (2016.01)

CPC (source: EP KR SE US)

F01P 7/16 (2013.01 - KR); **F01P 7/165** (2013.01 - SE); **F02M 26/24** (2016.02 - EP SE US); **F02M 26/28** (2016.02 - EP US);
F02M 26/33 (2016.02 - EP US); **F01P 7/165** (2013.01 - EP US); **F01P 2003/187** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2010053429 A1 20100514; BR PI0916115 A2 20151103; CN 102203402 A 20110928; CN 102203402 B 20141008;
EP 2342445 A1 20110713; EP 2342445 A4 20120606; EP 2342445 B1 20171213; JP 2012506973 A 20120322; JP 5001465 B2 20120815;
KR 101323776 B1 20131029; KR 20110070894 A 20110624; SE 0802349 A1 20100506; SE 534270 C2 20110621;
US 2011239996 A1 20111006; US 8627807 B2 20140114

DOCDB simple family (application)

SE 2009051196 W 20091021; BR PI0916115 A 20091021; CN 200980144247 A 20091021; EP 09825057 A 20091021;
JP 2011534446 A 20091021; KR 20117010503 A 20091021; SE 0802349 A 20081105; US 200913125830 A 20091021